

CLAIMS

What is claimed is:

1. A method for determining a display sequence for a domain name, said domain name having a plurality of labels separated by a label delimiter character, each
5 label comprising at least one character, said domain name comprising a stream of characters from a first character to a last character, said method comprising the steps of:
 - performing inferencing through resolving the direction of
indeterminate characters by assigning a strong direction left or right
10 to each indeterminate character; and
 - reordering said characters into a display order using the fully resolved characters previously inferenced.
2. The method as set forth in Claim 1 wherein said step of inferencing comprises the steps of:
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 - first, assigning a right-to-left direction to Arabic and Hebrew letters;
 - second, assigning a left-to-right direction to full stop characters and other alphabetic characters;
 - third, resolving the directions of digits; and
 - fourth, resolving the directions of hyphen-minus characters.
- 20 3. The method as set forth in Claim 2 wherein said step of resolving the directions of digits comprises the steps of:
 - assigning a right-to-left direction to all Arabic numerals; and

assigning a left-to-right direction to all European numerals, unless a European numeral is surrounded by right-to-left characters such as Arabic or Hebrew letters, in which case it is assigned a right-to-left direction.

4. The method as set forth in Claim 2 wherein said step of resolving the directions of hyphen-minus characters comprises:
- 5 assigning a left-to-right direction to all hyphen-minus characters which are not surrounded by characters whose direction is right-to-left; and assigning a right-to-left direction to all hyphen-minus characters which are surrounded by characters whose direction is right-to-left.
- 10 5. A computer readable medium encoded with computer executable software for determining a display sequence for a domain name, said domain name having a plurality of labels separated by a label delimiter character, each label comprising at least one character, said domain name comprising a stream of characters from a first character to a last character, said software when
- 15 executed causing a computer to perform the steps of:
- performing inferencing through resolving the direction of indeterminate characters by assigning a strong direction left or right to each indeterminate character; and
- reordering said characters into a display order using the fully resolved
- 20 characters previously inferenced.
6. The computer readable medium as set forth in Claim 5 wherein said software for inferencing comprises software for performing the steps of:

first, assigning a right-to-left direction to Arabic and Hebrew letters;
second, assigning a left-to-right direction to full stop characters and
other alphabetic characters;

third, resolving the directions of digits; and

5 fourth, resolving the directions of hyphen-minus characters.

7. The computer readable medium as set forth in Claim 6 wherein said software
for resolving the directions of digits comprises software for performing the
steps of:

assigning a right-to-left direction to all Arabic numerals; and

10 assigning a left-to-right direction to all European numerals, unless a
European numeral is surrounded by right-to-left characters such as Arabic or
Hebrew letters, in which case it is assigned a right-to-left direction.

8. The computer readable medium as set forth in Claim 6 wherein said software
for resolving the directions of hyphen-minus characters comprises software for
15 performing the steps of:

assigning a left-to-right direction to all hyphen-minus characters which
are not surrounded by characters whose direction is right-to-left; and

assigning a right-to-left direction to all hyphen-minus characters which
are surrounded by characters whose direction is right-to-left.

20 9. A system for determining a display sequence for characters of a domain name,
said domain name having a plurality of labels separated by a label delimiter
character, each label comprising at least one character, said domain name

comprising a stream of characters from a first character to a last character, said system comprising:

an inferencer adapted resolve the direction of indeterminate characters by assigning a strong direction left or right to each indeterminate character; and

a character reorderer adapted to re-sequence said characters into a display order using the fully resolved characters previously inferred.

10. The system as set forth in Claim 9 wherein said inferencer comprises:

a first direction assignor for assigning a right-to-left direction to Arabic and Hebrew letters;

a second direction assignor for assigning a left-to-right direction to full stop characters and other alphabetic characters;

a third direction assignor for resolving the directions of digits; and

a fourth direction assignor for resolving the directions of hyphen-minus characters.

11. The system as set forth in Claim 10 wherein said third direction assignor comprises:

a right-to-left direction assignor for all Arabic numerals, and for all European numerals which are surrounded by right-to-left characters such as Arabic and Hebrew letters; and

a left-to-right direction assignor for all European numerals which are not surrounded by right-to-left characters such as Arabic or Hebrew letters.

12. The system as set forth in Claim 10 wherein said fourth direction assignor comprises:

a left-to-right direction assignor for all hyphen-minus characters which are not surrounded by characters whose direction is right-to-left; and

5 a right-to-left direction assignor for all hyphen-minus characters which are surrounded by characters whose direction is right-to-left.